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EXAMINER

WALFORD, NATALIE K

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL JUDE IOSUE

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Appeal 2008-2838  
Application 10/765,538  
Technology Center 2800

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Decided: July 28, 2008

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Before EDWARD C. KIMLIN, TERRY J. OWENS, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final of rejection claims 16-19. Claim 16 is illustrative;

16. A method of making an image intensifier tube, said method including the steps of:

providing an annular tube body;

providing a microchannel plate disposed within said tube body;

providing an electrical contact structure between said tube body and said microchannel plate;

providing a yieldably deformable and axially-variable sealing structure sealingly uniting the tube body with a window member, said window member carrying a photocathode; and

yielding said axially-variable sealing structure while maintaining a selected fine-dimension spacing between the photocathode and microchannel plate.

The Examiner relies upon the following references in the rejection of the appealed claims;

de Groot	5,338,927	Aug. 16, 1994
Wheeler	5,493,111	Feb. 20, 1996

Appellant's claimed invention is directed to a method of making an image intensifier tube which comprises, *inter alia*, providing a yieldably deformable and axially-variable sealing structure which seals the tube body with a window member. According to Appellant's Specification, the seal material may be indium metal which undergoes a cold flow (see page 13 of Specification).

Appealed claims 16 and 19 stand rejected under § 35 U.S.C. 102(b) as being anticipated by Wheeler. Claim 17 and 18 stand rejected under § 35 U.S.C. 103(a) as being unpatentable over Wheeler in view of de Groot.

We have thoroughly reviewed each of Appellant's arguments for patentability. However, we agree with the Examiner that the claimed subject matter is unpatentable over the cited prior art. Accordingly, we will sustain the Examiner's rejections.

We consider first the Examiner's §102 rejection of claims 16 and 19 over Wheeler. Appellant does not dispute the Examiner's factual

determination that Wheeler, like Appellant, describes a method of making an image intensifier tube comprising the steps of providing an annular body, providing a microchannel plate disposed within the tube body, providing an electrical contact structure between the tube body and the microchannel plate, and providing a sealing structure which sealingly unites the tube body with the window member that carries a photocathode.

The principal argument advanced by Appellant is that Wheeler does not describe the presently claimed yieldable deformable and axially-variable sealing structure. Appellant, citing a dictionary definition of “deformable” as a material property meaning deformation upon application of force or stress, submits that seal 52 of Wheeler, a “braze flange member”, is not deformable. Appellant sets forth that “to braze is defined as using ‘solder with a high melting point’” and, therefore, the Wheeler seal is not deformable (page 10 of principal Br., last paragraph). Appellant poses the question “in the present method claim can the process that includes deformation meaning by stress or force be the same method as to braze one component with another component?”, and Appellant maintains that “the two methods are not identical as taught within the specification of the present application” (page 4 of Reply Br., third paragraph).

We are not persuaded by Appellant’s argument because it does not properly focus upon the pertinent disclosure of Wheeler. As acknowledged by Appellant, Wheeler provides the following relevant disclosure:

The window **16** is sealed into flange **52** with indium or similar sealed material **52'**.  
Flange member **52** is braised unto the housing member **50** at step portion **72**.  
(col. 7, ll. 65-col. 8, l. 1).

Hence, it can be seen that the braising emphasized by Appellant takes place between flange member 52 and housing member 50, and not at the location cited by the Examiner, namely, the indium seal between window 16 and flange 52. Wheeler does **not** disclose that indium, Appellant's seal material, is brazed onto the flange. As set forth by the Examiner,

[t]he Wheeler reference also teaches sealing the window 16 and the flange 52 with indium or similar seal material 52', [and] [t]he Wheeler reference and the Applicant both utilize the same sealing indium material for uniting the tube body with a window member, thus the Examiner interprets that the indium sealing material of the Wheeler reference exhibits the characteristics of yieldably deformable and axially-variable as Claimed [sic] by the Applicant (paragraph bridging pages 7-8 of Ans.).

Consequently, since there is no dispute that both Appellant and Wheeler employ the same material, indium, to seal the window member, it is reasonable to conclude that the indium seals of Appellant and Wheeler exhibit essentially the same property, namely, yieldably deformable and axially-variable. *See In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977).

Turning to the Examiner's § 103 rejection of claims 17 and 18 over Wheeler in view of de Groot, we concur with the Examiner that it would have been obvious for one of ordinary skill in the art to "utilize the fine-dimension spacing structure of de Groot for the image intensifier tube of Wheeler in order to prevent changes in the distance between the photocathode and the microchannel and thus maintain a precise distance between the photocathode and the microchannel plate during the operating lifetime of the image intensifier tube" (page 6 of Ans., second paragraph.).

We also agree with the Examiner that it would have been obvious for the skilled artisan to make the spacing structure integral with the photocathode. de Groot's exemplary disclosure that the fine-dimension spacing structure, beads, may be fixed integrally with the microchannel plate would have suggested that the beads may also be integrally fixed to the adjacent, spaced surface of the photocathode. We do not subscribe to Appellant's argument that this exemplary disclosure of de Groot qualifies as a teaching away of fixing the beads to the photocathode surface. In our view, one of ordinary skill in the art would have found it obvious to integrally fix the beads to either of the two surfaces which the beads function to separate. We note that Appellant presents no argument based upon unexpected results attributed to the features of claims 17 and 18.

In conclusion, based on the foregoing, the Examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR §1.136(a)(1)(iv).

AFFIRMED

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